## CUKUPEAN PATENT UPFICE

## **Patent Abstracts of Japan**

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c軸垂直方向

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サファイアc軸方向

(a)

APPLICANT: NEC CORP;

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H01L 29/778 H01L 21/338 H01L 29/812

H01L 21/205 H01L 29/201

TITLE

SEMICONDUCTOR DEVICE

c和垂直方向 配徳等の延在方向 ァイアc軸方向

れ角α

(b)

ABSTRACT:

PROBLEM TO BE SOLVED: To improve productivity, a heat radiating characteristic and the high speed operability of an element in a group III nitride semiconductor element.

SOLUTION: An epitaxial growing layer constituted of a group III nitride semiconductor is formed on a sapphire substrate with a face A ((11-20) face) as a main face. Then, a gate electrode 16, a source electrode 15 and a drain electrode 17 are formed on it. The extending directions of the electrodes are arranged to become the angle of within 20° with respect to a sapphire c-axis.

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